

DOCKET NO. SC12810TK

Please enter the following amendments:

In the Claims:

1. (Currently Amended) In a semiconductor package comprising a semiconductor die having a plurality of interconnect pads positioned thereon and along an edge thereof and at least one group of interconnect pads, the at least one group of interconnect pads comprising:

a differential pair of victim interconnect pad pads, each having first, second, third and fourth sides and positioned adjacent to each other along the first sides thereof, each having a second side facing toward the edge and an opposite third side, the fourth side thereof being opposite the first side, the differential pair of victim interconnect pads being configured to carry a signal that is susceptible to noise created by surrounding signals; and six shield interconnect pads functioning as shields to the victim interconnect pad, at least four a first and a second of the shield interconnect pads being respectively offset from the second and third sides of a first of the differential pair of victim interconnect pads, a third and a fourth of the shield interconnect pads being respectively offset from the second and third sides of a second of the differential pair of victim interconnect pads, a fifth of the shield interconnect pads being offset from the fourth side of the first of the differential pair of victim interconnect pads, a sixth of the shield interconnect pads being offset from the fourth side of the second of the differential pair of victim interconnect pads, wherein no additional victim interconnect pads are positioned substantially along diagonals of the differential pair of victim

DOCKET NO. SC12810TK

~~interconnect pads near the victim interconnect pad and closer to the victim interconnect pad than other noise sources from external to the semiconductor die wherein the at least four of the shield interconnect pads form a noise shield within a periphery of the victim interconnect pad.~~

2. (Currently Amended) The semiconductor package of claim 1 wherein each of the at least four of the six shield interconnect pads is an interconnect for ground or power.

3. (Currently Amended) The semiconductor package of claim 1 wherein each of the differential pair of the victim interconnect pad pads conducts a signal that is sensitive to noise.

4. (Currently Amended) The semiconductor package of claim 1 wherein ~~the four interconnect shield pads are respectively positioned in each of four quadrants surrounding the victim interconnect pad~~ further comprising a plurality of wires, each of which is connected to a respective corresponding one of the differential pair of victim interconnect pads and six shield interconnect pads and extending from the semiconductor die over the edge, the plurality of wires forming a cage to shield signals from the differential pair of victim interconnect pads.

Claim 5 (Canceled)

6. (Currently Amended) The semiconductor package of claim 1 further comprising a bond wire connected to each of the differential pair of victim interconnect pad pads and the six shield interconnect pads.

DOCKET NO. SC12810TK

7. (Currently Amended) The semiconductor package of claim 6 wherein each bond wire that is connected to each of the differential pair of victim interconnect ~~pad pads~~ and the six shield interconnect pads is routed to a support structure while maintaining a shield structure around the bond wire connected to the victim interconnect pad.

8. (Currently Amended) The semiconductor package of claim 7 wherein the shield structure further comprises a physical arrangement of bond wires electrically connected to the six shield interconnect pads to form a cage substantially around ~~the bond wire~~ bond wires respectively electrically connected to the differential pair of victim interconnect ~~pad pads~~, the bond wires electrically connected to the six shield interconnect pads being closer to the ~~bond wire~~ wires electrically connected to the differential pair of victim interconnect ~~pad pads~~ than other noise sources radiating from bond wires of the semiconductor package.

9. (Currently Amended) The semiconductor package of claim 1 wherein the differential pair of victim interconnect ~~pad pads~~ further comprises ~~two victim interconnect pads positioned adjacent to each other and surrounded by the shield interconnect pads~~ respectively conduct power and ground signals.

10. (Currently Amended) The semiconductor package of claim 9 1 wherein ~~the two victim interconnect pads conduct a differential signal~~ not all of the shield interconnect pads have a same shape.

Claims 11-13 (Canceled)

DOCKET NO. SC12810TK

14. (Currently Amended) A semiconductor package comprising:
a support structure;
a semiconductor die overlying the support structure;
a plurality of interconnects electrically connecting the support structure
and the semiconductor die; and

~~at least one~~ a shielding group of interconnects interconnect pads on a
same level of the semiconductor die that electrically shield a
predetermined victim interconnect pad also located on the same
level of the semiconductor die from noise sources, the victim
interconnect pad having first, second, third and fourth sides, the
~~at least one~~ shielding group of interconnects shield interconnect
pads comprising ~~at least four~~ eight interconnects shield
interconnect pads, ~~surrounding a periphery region of the victim~~
~~interconnect and being positioned closer to the victim~~
~~interconnect than any of the plurality of interconnects~~ a
respective one of the eight shield interconnect pads being
respectively offset from each side of the victim interconnect pad,
and a respective one of the eight shield interconnect pads being
offset diagonally from each corner of the victim interconnect pad,
thereby resulting in three of the eight shield interconnect pads
being aligned along an outer edge of the semiconductor die.

Claims 15-17 (Canceled)

18. (Currently Amended) The semiconductor package of claim 14
wherein each interconnect pad of the ~~at least one~~ shielding group of
interconnects interconnect pads ~~further comprise an interconnect pad located~~

DOCKET NO. SC12810TK

~~on the semiconductor die and~~ has a respective connected bonding wire that forms a portion of a bonding wire cage that exists from the semiconductor die to a predetermined site on the support structure.

Claims 19 and 20 (Canceled)

Claim 21 (Canceled)

22. (New) A semiconductor package comprising:
- a support structure;
 - a semiconductor die overlying the support structure and having an edge;
 - a plurality of interconnects electrically connecting the support structure and the semiconductor die;
 - a first row of interconnect pads, the first row of interconnect pads being positioned closest to the edge of the semiconductor die and comprising no victim signal interconnect pads;
 - a second row of interconnect pads, the second row of interconnect pads being centered further away from the edge of the semiconductor die than the first row of interconnect pads and comprising a victim interconnect pad;
 - a third row of interconnect pads, the third row of interconnect pads being centered further away from the edge of the semiconductor die than either the first row or the second row, each of the first row, the second row and the third row being on a same level of the semiconductor die; and
 - a plurality of shielding interconnect pads positioned in the first row and in at least one of the second row and the third row, the plurality of shielding interconnect pads positioned radially around a

DOCKET NO. SC12810TK

periphery region of the victim interconnect pad and closer to the victim interconnect pad than any of the plurality of interconnects.